IN THE UNITED STATES DISTRICT COURT

FOR THE NORTHERN DISTRICT OF CALIFORNIA

SUN MICROSYSTEMS, INC.,

Plaintiff,

v.

NETWORK APPLIANCE, INC.,

Defendant.
/

No. C-07-05488 EDL

ORDER GRANTING SUMMARY JUDGMENT OF NON-INFRINGEMENT OF U.S. PATENT NO. 5,632,012

I. INTRODUCTION

On October 29, 2007, Sun Microsystems, Inc. ("Sun") filed its Complaint, alleging that Network Appliance, Inc. ("NetApp") infringed and is infringing, directly and indirectly under 35 U.S.C. § 271, certain of its patents, by making, using, selling, or offering for sale certain data processing systems and related software. Sun seeks a declaratory judgment that certain patents owned by Sun are each not infringed, are invalid and/or are unenforceable, as well as a permanent injunction and damages. On December 21, 2007, NetApp filed an Answer and Counterclaim, denying the material allegations of Sun's Complaint and asserting a number of affirmative defenses and counterclaims. NetApp denies infringing any of the Sun Patents, including the patent at issue in this motion (U.S. Patent Number 5,632,012 (the "'012 Patent")) and alleges that Sun infringes a number of its patents instead. On December 22, 2008, this Court issued an Order Construing Claims (the "12/22/08 Order") in which it construed certain disputed terms and/or phrases contained in various claims in the patents at issue between the parties, including two terms contained in the '012 patent. The parties subsequently conducted discovery, and each party has filed two motions in the above-captioned 07-5488 case.

On December 2, 2009, NetApp filed a Motion For Summary Judgment Of Non-Infringement Of U.S. Patent No. 5,632,012 (the "'012 Motion") on the basis that its allegedly infringing product, Data ONTAP ("DOT"), does not practice the "logical partitions comprising dedicated partitions currently storing data and free partitions available to store data" and the "periodically verifying the integrity of data currently stored in each of said identified dedicated partitions" claim limitations of the '012 Patent because the accused portions of DOT (hot spare disks and the non-filesystem region) are not "free partitions" that are "available to store data." The '012 Motion was fully briefed, and a hearing was held on January 20 and January 27, 2010. Having considered the record in this case and the parties' statements at oral argument, and for the reasons set forth below, the Court hereby GRANTS NetApp's Motion For Summary Judgment Of Non-Infringement of the '012 patent.

II. LEGAL STANDARD

A. Summary Judgment

Summary judgment shall be granted if "the pleadings, discovery and disclosure materials on file, and any affidavits show that there is no genuine issue as to any material fact and that the movant is entitled to judgment as a matter of law." Fed. R. Civ. Pro. 56(c). Material facts are those which may affect the outcome of the case. See Anderson v. Liberty Lobby, Inc., 477 U.S. 242, 248 (1986). A dispute as to a material fact is genuine if there is sufficient evidence for a reasonable jury to return a verdict for the nonmoving party. Id. The court must view the facts in the light most favorable to the non-moving party and give it the benefit of all reasonable inferences to be drawn from those facts. Matsushita Elec. Indus. Co. v. Zenith Radio Corp., 475 U.S. 574, 587 (1986). The court must not weigh the evidence or determine the truth of the matter, but only determine whether there is a genuine issue for trial. Balint v. Carson City, 180 F.3d 1047, 1054 (9th Cir. 1999).

A party seeking summary judgment bears the initial burden of informing the court of the basis for its motion, and of identifying those portions of the pleadings and discovery responses that demonstrate the absence of a genuine issue of material fact. Celotex Corp. v. Catrett, 477 U.S. 317, 323 (1986). Where the moving party will have the burden of proof at trial, it must affirmatively demonstrate that no reasonable trier of fact could find other than for the moving party. On an issue where the nonmoving party will bear the burden of proof at trial, the moving party can prevail

merely by pointing out to the district court that there is an absence of evidence to support the nonmoving party's case. Id. If the moving party meets its initial burden, the opposing party "may not rely merely on allegations or denials in its own pleading;" rather, it must set forth "specific facts showing a genuine issue for trial." See Fed. R. Civ. P. 56(e)(2); Anderson, 477 U.S. at 250. If the nonmoving party fails to show that there is a genuine issue for trial, "the moving party is entitled to judgment as a matter of law." Celotex, 477 U.S. at 323.

B. Patent Infringement

"To prove infringement, the patentee must show that the accused device meets each claim limitation either literally or under the doctrine of equivalents." Catalina Mktg. Int'l v. Coolsavings.com, Inc., 289 F.3d 801, 812 (Fed. Cir. 2002). A determination of infringement, whether literal or under the doctrine of equivalents, is a question of fact. Id. "Literal infringement requires the patentee to prove that the accused device contains each limitation of the asserted claim." Id. "Summary judgment of no literal infringement is proper when, construing the facts in a manner most favorable to the nonmovant, no reasonable jury could find that the accused system meets every limitation recited in the properly construed claims." Id. Where the parties do not dispute any relevant facts regarding the accused product, but disagree over possible claim interpretations, the question of literal infringement collapses into claim construction and is amenable to summary judgment. General Mills, Inc. v. Hunt-Wesson, Inc., 103 F.3d 978, 983 (Fed. Cir. 1997); cf. Int'l Rectifier Corp. v. IXYS Corp., 361 F.3d 1363, 1375 (Fed. Cir. 2004) (distinguishing General Mills on the basis that only the structure of the accused devices had been stipulated to, not the disputed factual determination of whether the device met the claims as construed, but not addressing the scenario in which no reasonable juror could find that a certain claim limitation was met).

In MyMail Ltd. v. America Online, Inc., 476 F.3d 1372, 1378 (Fed. Cir. 2007), the Federal Circuit reviewed a District Court order granting summary judgment of non-infringement. Because there were no material factual disputes as to the operation of the accused systems, and the parties' disagreements concerned whether the defendants' systems performed "authentication" as defined by the patent and construed by the district court, the Federal Circuit found that the issue reduced to a question of claim interpretation and affirmed summary judgment. See id. (noting that the accused

product did not satisfy the authentication requirement as it did not validate the user's ID and password, as required by the patent's authentication process). These cases teach that the Court cannot leave it to the jury to decide the proper scope of the patent claim terms. 02 Micro Int'l Ltd. v. Beyond Innovation Tech. Co. Ltd., 521 F.3d 1351, 1360 (Fed. Cir. 2008) ("When the parties raise an actual dispute regarding the proper scope of the[] claims, the court, not the jury, must resolve the dispute.").

"Infringement under the doctrine of equivalents requires the patentee to prove that the accused device contains an equivalent for each limitation not literally satisfied." Id. The Court may not apply the doctrine of equivalents so as to vitiate a claim limitation. Warner-Jenkinson, 520 U.S. at 29, 39 n.8. The Federal Circuit articulates the test for equivalence in two different ways. See Voda v. Cordis Corp., 536 F.3d 1311, 1326 (Fed. Cir. 2008). Under the insubstantial differences test, "[a]n element in the accused device is equivalent to a claim limitation if the only differences between the two are insubstantial." Honeywell Int'l Inc. v. Hamilton Sundstrand Corp., 370 F.3d 1131, 1139 (Fed.Cir. 2004); Warner-Jenkinson Co. v. Hilton Davis Chem. Co., 520 U.S. 17, 40 (1997)). Alternatively, under the function-way-result test, an element in the accused device is equivalent to a claim limitation if it "performs substantially the same function in substantially the same way to obtain substantially the same result." Schoell v. Regal Marine Indus., Inc., 247 F.3d 1202, 1209-10 (Fed. Cir. 2001). "Where the evidence is such that no reasonable jury could determine two elements to be equivalent," summary judgment of non-infringement under the doctrine of equivalents is proper. Warner-Jenkinson, 520 U.S. at 39 n. 8. Summary judgment has been rejected because of conflicting expert testimony on the application of the function-way-result test. Crown Packaging Tech., Inc. v. Rexam Bev. Can Co., 559 F.3d 1308, 1315 (Fed. Cir. 2009) (holding that conflicting expert evidence regarding function establishes material issue of fact).

III. NETAPP'S MOTION FOR SUMMARY JUDGMENT OF NON-INFRINGEMENT OF U.S. PATENT NO. 5,632,012

A. Patent and Claim Construction Background

The '012 Patent, "Disk Scrubbing System," is directed to a method of verifying the integrity of data and correcting errors on storage media (i.e., "scrubbing") in a data storage subsystem, by

selectively determining what to scrub and what not to scrub. What is newly claimed in the '012 patent is identifying and selecting memory locations containing customer or redundancy data and verifying those locations on a priority basis. Homrig Decl. Ex. 4 ('012 Patent) at 2:61-67. In the claimed invention, the disk drive array is divided into a plurality of logical partitions, including "free" partitions and "dedicated" partitions, where free partitions are "available to store data" and dedicated partitions "currently contain data." Id. at 17:40-43. The claimed invention determines whether the partitions are "dedicated" or "free." Id. at 17:38-63, 20:38-62. The patent provides a performance benefit in that it keeps track of "free" and dedicated" partitions and periodically scrubs data stored in dedicated partitions and tracks of free partitions that are storing administrative data, while ignoring all other available storage space. See id. at 15:30-43, Fig. 10. It does this by tracking partitions that are available to store data through a "free space directory" that contains a "list of all of the logical cylinders in the disk drive array data storage subsystem" and "indicates the amount of free space that [the] logical cylinder presently contains." Id. at 8:44-50.

Each asserted claim of the of the '012 Patent requires "logical partitions" comprising both "dedicated partitions currently storing data" and "free partitions available to store data." The claims also require "periodically verifying the integrity of data currently stored in each of said identified dedicated partitions." For example, independent claim 1 provides:

> 1. A data storage subsystem that receives data from at least one connected data processor and stores said data on a plurality of disk drives divided into a plurality of logical partitions, said **logical partitions comprising dedicated partitions currently storing data and free partitions available to store data**, said data storage subsystem comprising:
>
> a memory controller independent of said plurality of disk drives comprising means for identifying said dedicated and said free partitions;
>
> means for reading said memory controller to determine the identity of said dedicated partitions; and
>
> means responsive to said reading of said memory controller for **periodically verifying the integrity of data currently stored in each of said identified dedicated partitions**, said means for periodically verifying comprising:
>
> means for reading data in each of said identified dedicated partitions;
>
> means responsive to said reading of data from each said identified dedicated partition for generating error check information from said read data;
>
> means responsive to said generation of said error check information for detecting

errors in data in each said identified dedicated partition; and

means responsive to said detection of errors for correcting said data containing errors.

'012 Patent at 17:38-63.

During claim construction, the Court was not asked to construe the terms "partition," "free partition," "dedicated partition," or "available to store data." Instead, in connection with claim 1, the Court construed the term, "means responsive to said reading of said memory controller for periodically verifying the integrity of data currently stored in each of said identified dedicated partitions" as a means-plus-function limitation, having the function of "periodically verifying the integrity of data currently stored in each of said identified dedicated partitions," and the corresponding structure of "the control unit 101 and the disk drive subassembly programmed to execute steps 1202 to 1207 illustrated in Figure 12 and described at col. 15:47-62, and step 1008 illustrated in Figure 10 and described at col. 15:63-16:25." See 12/22/08 Claim Construction Order at 31.

However, in connection with the terms highlighted above, the Court noted that, during the prosecution process, Sun:

> drew two separate distinctions, both stating that the invention "'periodically verifies' selected memory locations containing data," id. at 15, and that another aspect of the invention – which they described as "fundamental" – was only scrubbing active data (with one exception), as set forth above. Thus, the prosecution history as a whole shows a clear disavowal of claim scope beyond verifying only dedicated partitions, with the sole exception of verifying free partitions containing administrative data.

Id. at 24-25. NetApp's Motion focuses on this statement in order to characterize the '012 Patent as having clearly disavowed the "indiscriminate scrubbing" of prior art, and instead disclosing an invention that intelligently determines which portions of the system presently contain active data and scrubs only those portions, while ignoring the portions of the system that do not contain active data. See, e.g., Homrig Decl. Ex. 5 ('012 Patent file history) at NAB0014545 ("fundamental concept of the claimed invention which improves performance of the scrubbing process in a data storage subsystem by scrubbing (periodically verifying the integrity of) **only** those logical partitions which are identified as containing **active data**.") (emphasis in original); Ex. 6 (Sun's Responsive Claim

Construction Brief) at 16 ("'012 Patent does not extend to systems that blindly scrub all memory locations").

B. Sun's Infringement Assertions

Sun contends that DataONTAP's (hereinafter "DOT") "RAID scrub" feature infringes claim 1 of the '012 Patent. See generally Homrig Decl. Ex. 2 (Sun's Patent Local Rule 3-6 Disclosures). NetApp describes its scrub feature as "checking the disk blocks of all disks on the storage system for media errors and parity consistency," and if it finds errors or inconsistencies, "it fixes them by reconstructing the data from other disks and rewriting the data." Id., Ex. 7 (DOT 7.2 Storage Management Guide) at 150. Sun's expert Dr. Smith similarly describes DOT's scrub feature as checking for errors and correcting them using parity disks. See generally id. Ex. 8 (Smith Expert Report) ¶ 705. Thus, the basic operation of the accused products is undisputed.

However, the parties disagree over the characterization of how the accused "scrubbing" functionality operates. NetApp contends that DOT "blindly scrub[s] all memory locations in the filesystem region . . . until they have checked every possible filesystem region storage location." Motion at 1. NetApp contrasts this with its view of the '102 Patent as distinguishing itself from the blind, sequential scrubbing of the prior art by "intelligently determining what to scrub and what not to scrub" based on whether the partition in question contains active data. Id. Sun counters that DOT does not scrub indiscriminately, as it is characterized by NetApp, but instead practices the "dedicated" and "free" partition limitations of the patent by deciding to scrub the filesystem region and not scrub the non-filesystem region and spare disks.

C. NetApp's Motion

NetApp moves for summary judgment on both procedural and substantive grounds. As an initial matter, NetApp argues that Sun's infringement theory must be rejected because it was not adequately disclosed in Sun's Patent Local Rule 3-6 disclosures. NetApp argues that Sun failed to explain its infringement theory by impermissibly citing 319 pages of source code and "additional files and functions that reference these files" without explanation or analysis and without calling out

spare disks, non-file system regions, and failed disks[1] as the accused "free partitions." Motion at 10 (citing Ex. 2 at 7). Sun counters that its disclosures were adequate under the Local Rules, and that instead NetApp's motion is procedurally improper because it relies on NetApp's own interpretation of disputed claim terms that have not yet been construed. As discussed below, the Court rejects both parties' procedural arguments and proceeds to the merits of the Motion.

Substantively, NetApp argues that no reasonable juror could find it to have infringed the '012 Patent literally or under the doctrine of equivalents because the accused product scrubs the filesystem region indiscriminately without the use of partitions, and lacks unscrubbed free partitions. It argues that the portions of the system that Sun equates to free partitions – spare disks and the non-filesystem region – are not "available to store data," are not logical storage divisions, and are not associated with the parity data needed to correct errors, and therefore are not even eligible for the claimed scrubbing process. NetApp contends that any argument to the contrary would contradict Sun's disclaimers relating to indiscriminate, blind scrubbing during prosecution. Sun counters that, under its proposed construction of the terms "partition," "free partition" and "dedicated partition," NetApp's DOT scrub feature infringes both literally and under the doctrine of equivalents.

1. Adequacy of Sun's Patent Local Rule Disclosures

NetApp argues that Sun's infringement theory, that the accused products infringe because they never scrub spare disks and non-filesystem regions, should be rejected because it was not adequately disclosed as required by Patent Local Rules 3-1 and 3-6. Patent Local Rule 3-1 requires parties to, among other things, identify each accused product for each asserted claim and provide a chart specifically identifying where each element of each asserted claim is found within each accused product. Patent Local Rule 3-6 provides a method for parties to amend infringement contentions later in the litigation for good cause, but does not change the requirements of Local Rule 3-1 as to what is required to be disclosed. Sun's Patent Local Rule 3-6 disclosure for claim 1 states that:

> Data ONTAP organizes disks into RAID groups, which are collections of data

[1]NetApp's Motion addresses the issue of whether "failed disks" can be free partitions because the theory was mentioned in Sun's expert report. However, Sun concedes that failed disks are no longer accused and are therefore not addressed in this Order. See 1/20/10 Tr. at 100.

> and parity disks, to provide parity protection. Data ONTAP supports ... RAID4 technology. [Exhibit A, p. 14]
>
> Each NetApp system includes a processor programmed to run Data ONTAP software to identify logical partitions comprising dedicated partitions currently storing data and free partitions available to store data. Each version of Data ONTAP 7.0 and later satisfies this limitation through software code within files rg_fsm.c [NASC14690-14866]; disk_fsm.c [NASC14627-14689]; rg_fsm.h [NASC14562-14565]; disk_fsm.h [NASC14562-14565]; disk_fsm.h [NASC14560-14561]; map.h [NASC14566-14570]; rg_bigio.c [NASC14571-14587], further including but not limited to the raidmap_t function, scrub_init function, and bigio_setup_next raidio function therein, and additional files and functions that reference these files.

Homrig Decl. Ex. 2 at 2. NetApp argues that Sun's citation of hundreds of pages of source code was insufficient to timely apprise it of Sun's theory, and that the theory was not really disclosed until Sun's expert report was produced in mid-October.

Sun counters that this disclosure is adequate under the patent local rules, in that the rules do not require a narrative description of Sun's infringement theory and Sun complied with the rules by specifying approximately 300 lines of code, out of the 20 million lines that were available for inspection. Sun argues that NetApp and its expert would have had to engage in "willful blindness" not to understand Sun's infringement theory after examining the source code identified by Sun. Additionally, Sun argues that NetApp did not timely raise any complaint with respect to Sun's 3-6 disclosures.

Sun's disclosure of 300 lines of code out of nearly 20 million is relatively specific. While it would have been preferable for Sun's disclosures to be more transparent, by specifically calling out the non-filesystem region and spare disks as free partitions and the filesystem region as the dedicated partition, it is not clear that the Local Rules require such detail. NetApp has not identified any prejudice resulting from Sun's alleged failure to reveal its amended infringement theory until production of Sun's expert report, other than that it would have searched for prior art to show invalidity at an earlier date. NetApp has also not adequately responded to Sun's contention that NetApp and its experts should have understood Sun's theory by examining the cited source code. Furthermore, NetApp could have brought the issue to Sun's attention, or even filed a motion, when it received the disclosures if it truly needed clarification. Therefore, the Court will not grant summary judgment on this basis.

2. Propriety of NetApp's Motion Based on Disputed Claim Terms That Have Not Been Previously Construed

Sun argues that the Court should not consider NetApp's Motion because it is based on disputed claim terms "partition," "free partition,' and "dedicated partition," that have not yet been construed. Opp. at 4. The Court's Case Management Order provided that the Court, "will first consider summary judgment motions that involve issues relating to the claim terms that the Court already construed." 1/29/09 Order Following Case Management Conference.

In the parties' Joint Claim Construction Statement, Sun contended that the terms "dedicated partitions" and "free partitions" are clear on their face and do not require construction. See Corbett Decl., Ex. 3 at Ex. A p.70. It was only on October 5, 2009, in an email discussion between counsel, that Sun proposed a construction for these terms. See id. Ex. 4. The parties now both acknowledge that these terms are in dispute. See Ho Decl. Ex. 8 (Smith Expert Report) at ¶608 (chart of parties' proposed constructions of disputed terms). The parties also now dispute the proper construction of the term "available to store data." See Dkt. No. 338 (Joint Submission Following Summary Judgment Hearing). Both parties have provided the Court with argument concerning their respective proposed constructions of these terms in the context of this Motion, so to the extent that construction of these terms is needed, the Court has sufficient information before it to construe the terms in question. Additionally, the Motion has been fully briefed on the merits. Therefore, it would not serve judicial efficiency to decline to rule on the Motion at this time.

The parties' respective proposed construction of the relevant terms is as follows:

Claim Term	NetApp's Construction	Sun's Construction
Partition	On 1/20/10: Logical cylinder (substantially equal-sized and dynamically tracked) On 1/27/10: Portion of verifiable memory space	All or a segment of a memory space
Free Partitions	Logical cylinders / Portions of verifiable memory space in which all space is free and no data is currently stored	Partitions which do not contain customer or redundancy data

Dedicated Partitions	Logical cylinders / Portions of verifiable memory space in which space has been allocated and data is currently stored	Partitions which contain customer or redundancy data
Available to store data	On 1/27/10: Configured to store verifiable data, such as customer and redundancy data	Unambiguous

At the end of the first oral argument on the '012 Motion, it appeared that the parties might be able to agree on which of these terms actually needs to be construed in order to decide the motion. Counsel for NetApp stated, "'Free partitions available to store data.' That's all we're talking about. We're not talking about logical cylinders. We're not talking about dedicated partitions." 1/20/10 Tr. at 124. He further stated, "the only point is, free partition available to store data. In order for a free partition to be available to store data, it has to be formatted, capable of having a redundancy . . . group. It has to be parity [protectible]." Id. at 125. The Court then questioned Sun on whether it would agree that a free partition must be capable of being parity protected, as this could narrow the issues. Sun agreed that claim 9 might require parity protection, but would not agree to the same for claim 1. Id. at 125-28. The Court therefore ordered the parties to meet and confer to attempt to narrow the issues before the January 27, 2010 hearing.

The parties were unable to come to any agreement in the interim, and filed a joint submission wherein Sun stated that the Court would need to construe all of the terms listed above, and NetApp stated that the Court would only need to decide whether a "partition" must be "a portion of a verifiable memory space" and whether "available to store data" requires "a free partition configured to store verifiable data, such as customer and redundancy data." See Dkt. No. 338 (Joint Submission Following Summary Judgment Hearing). During the second hearing on the motion, the focus of the parties' dispute shifted to whether a "free partition" must be "verifiable" (i.e., parity protected) and configured to contain customer and redundancy data, or whether the ability to store administrative data is sufficient. Therefore, the Court must perform some construction of the term "free partition" to decide the motion. As explained more fully below, the Court concludes that a free partition cannot be "all of a memory space," as advanced by Sun, and must be configured to be capable of

storing customer and redundancy data.

3. NetApp Products Do Not Literally Infringe

There is no dispute between the parties that NetApp's accused products scrub the entire filesystem region of the products. There is also no dispute that the accused products do not scrub any portion of the non-filesystem region or spare disks associated with the accused products. The basic disagreement between the parties is whether the non-filesystem region or spare disks associated with NetApp's accused products can be viewed as "free partitions" that are "available to store data." The Court GRANTS the Motion on the basis that the non-filesystem region and spare disks are not free partitions "available to store data." NetApp's arguments that its products do not even contain partitions, and that the filesystem region as a whole is not a "dedicated partition," while less important, lend additional support to the Court's decision.

A. Does the Patent Require that Free Partitions Be "Verifiable," i.e., Parity Protected or Associated With Redundancy Data?

Though not the apparent focus of the parties' briefs, a primary issue during oral argument was "parity protection" and whether the '012 Patent requires that free partitions be "verifiable," which NetApp uses interchangeably with the terms "parity protected" and "associated with redundancy disks." NetApp argues that disk scrubbing necessarily involves using parity protection to correct errors on disk, and thus the '012 Patent requires that the areas to be scrubbed have parity protection; i.e., are associated with redundancy disks. NetApp points to Figure 5 of the '012 Patent, which it contends shows that all of the free partitions contemplated by the patent are associated with redundancy because of the patent's use of "N+M" ("M" indicating redundancy data). NetApp also points to the testimony of Sun's expert, Dr. Smith, that he believes that "data" as used in claim 1 ("A data storage subsystem that receives data from at least one connected data processor") is "customer data." See also Docket #287, Ex. 7 at NAB0014264 (statement by Sun to PTO in the file history that "the 'active data' stored in the data storage subsystem clearly refers to the 'customer and redundancy' data in the preceding sentence of the specification. However, in order to advance the prosecution of this patent application, applicants have amended claims 1, 10, 11, 14, 23 and 24 to recite simply 'data' rather than 'active data.'"). NetApp contends that if the invention is interpreted

to encompass *not* scrubbing areas that are not even eligible to store customer and redundancy data and are not parity protected, then the invention does not perform its claimed purpose because redundancy data is necessary for scrubbing. See Homrig Decl. Ex. 14 (Smith Depo.) at 170-172 (confirming that, "if there is no parity to scrub, you can't scrub it"). NetApp argues that, in the patent itself, the free partitions are available to store customer and redundancy data and are in a RAID group, so they have parity protection. Because the accused "free partitions" (hot spare disks and non-filesystem regions) are neither parity protected nor available to store customer or redundancy data, according to NetApp there is no infringement.

Sun counters that NetApp's arguments are not specifically tethered to any particular claim language, but instead to the "claim language as a whole and the disclaimer." Sun contends that NetApp's argument is essentially a "gist" of the invention argument and attempts to read the overall requirement of parity protection into each of the claims and the definition of "free partition." For this argument, Sun cites Aro Mfg. Co. v. Convertible Top Replacement Co., 365 U.S. 336, 344-45 (1961), which states that "there is no legally recognizable or protected 'essential' element, 'gist' or 'heart' of the invention in a *combination patent*." (emphasis added). However, Aro is distinguishable in that it made this statement in the context of a combination patent, where each claim encompassed a combination of unpatented elements and the court found it impermissible to claim infringement of one unpatented element. The Court stated that, "if anything is settled in the patent law, it is that the combination patent covers only the totality of the elements in the claim and that no element, separately viewed, is within the grant. . . . The basic fallacy in respondent's position is that it requires the ascribing to one element of the patented combination the status of patented invention in itself." Here, the dispute is not over one unpatented element of a combination patent, but over the application of particular patent claims to an accused device. Therefore, this case does not advance Sun's position.

Sun also argues that the '012 claims do not mention parity protection for free partitions (they refer generally to a "method for correcting data errors in a data storage subsystem," see, e.g., '012 Patent at 20:15-16), and at oral argument for the first time pointed to one place in the specification which Sun contends refers to another type of error correction process by name. See '012 Patent at

10:9-10 ("[o]ne error correction method is the use of a Reed-Solomon error detection/correction code to recreate the data that cannot be read directly"). However, Sun did not present any expert testimony on the Reed-Solomon method, including whether or not it uses uses parity, and therefore this reference does not support Sun's contention. Sun further contends that independent claims 1, 15 and 24 require only that dedicated partitions be "detectable and correctable," and say nothing about whether free partitions must be parity protected. According to Sun, only unasserted independent claims 9, 23 and 28 include limitations requiring detection and correction of administrative data in free partitions, but even these claims do not specifically require "parity protection." However, Sun does not explain, nor provide any expert testimony, showing how the detection and correction of administrative data in free partitions of claims 9, 23 and 28 could be accomplished other than through parity. Finally, Sun argues that a free partition to which no data has ever been written will not have parity data.

NetApp counters by reliance on Phillips v. AWH Corp., 415 F.3d 1303, 1316 (Fed. Cir. 2005), for the proposition that a claim term "can be defined only in a way that comports with the instrument as a whole," and that "the specification necessarily informs the proper construction of the claims." These general propositions do aid NetApp. However, to the extent that Phillips also addresses the situation where the specification provides a "special definition" for a claim term that differs from the meaning it would otherwise possess (the "own lexicographer" doctrine), the specification here did not do so in any clear manner.

NetApp also cites Docket No. 267, Ex. 5 ('012 File History) at NAB0014544 to argue that, during prosecution, Sun acknowledged that administrative data is scrubbed in free partitions in the invention. Additionally, NetApp cites Docket No. 287, Ex. 7 ('012 File History) at NAB0014273 where Sun stated that: "The disk scrubbing system of the claimed invention periodically reads ALL data in the data storage subsystem regardless of the frequency of host system access to the various data. In reading the data, the disk scrubbing process verifies the integrity of the data stored in the subsystem." NetApp argues that these statements mean that the invention requires that all data in the subsystem be verifiable, including administrative data.

NetApp contrasts this approach with its accused product, which it contends contains

administrative data in the spare disks and non-filesystem regions that is never – and cannot be – scrubbed or parity protected. Further, according to NetApp, Sun explained during prosecution that all partitions were intended to include customer and redundancy data. See id. at NAB0014264 ("the 'active data' stored in the data storage subsystem clearly refers to the 'customer and redundancy' data in the preceding sentence of the specification. However, in order to advance the prosecution of this patent application, applicants have amended claims 1, 10, 11, 14, 23 and 24 to recite simply 'data' rather than 'active data.'").

This is a close question. On the one hand, NetApp is correct that the admitted purpose of the invention is to scrub the portions of the subsystem that contain active data and not scrub portions that do not contain active data, and does not appear to contemplate "deciding" not to scrub parts of the system that are incapable of being scrubbed in the first place. On the other hand, Sun is correct that the asserted independent claims do not expressly require this. While the Court finds NetApp's arguments somewhat more persuasive, the Court need not rely on this issue to grant summary judgment.

B. Proper Construction of "Free Partitions" "Available To Store Data"

NetApp initially proposed construction of the term "free partitions" as "logical cylinders in which all space is free and no data is currently stored." Sun challenged NetApp's initial construction in part because it would preclude a free partition from containing administrative data, which the claims and this Court's Claim Construction Order specifically allow for. See '012 Patent at 18:64-65; 12/22/08 Claim Construction Order. NetApp shifted gears at the second hearing and instead proposed to construe "free partition" as "a portion of verifiable memory space" that is "configured to store verifiable data, such as customer and redundancy data." Sun proposes to construe "free partitions" as "[all or a segment of a memory space] which do[es] not contain customer or redundancy data." Thus, the decisive difference between the parties' current proposed constructions is whether a free partition must be configured to be able to store "customer or redundancy data," or whether it is sufficient if the free partition can contain only administrative data. Resolution of this dispute turns on two questions: (1) what is the correct construction of the term

"data" as used in the patent; and (2) how closely must a free partition must be associated with a RAID group.

First, with respect to the term "data," NetApp persuasively argues that Sun's infringement theory hinges on an internally inconsistent interpretation of the term "data." Specifically, NetApp points out that Sun's proposed construction of the term "dedicated partition currently storing data" means a partition that "contains customer or redundancy data." Thus, in the context of "dedicated partitions," Sun defines "data" as "customer or redundancy data." In contrast, in connection with "free partitions," Sun argues that "data" can be "administrative data" and need not be limited to "customer or redundancy data." Nothing in the '012 Patent indicates that the term "data" should be interpreted differently with respect to free and dedicated partitions, and the patent contemplates the existence of administrative data in both free and dedicated partitions and provides for scrubbing of administrative data in both free and dedicated partitions. Homrig Decl. Ex. 4 at 15:30-44. NetApp is correct that, were Sun to consistently construe "data" so that dedicated partitions could encompass mere administrative data, then it would necessarily follow that the non-filesystem region and spare disks (which Sun admits contains administrative data) would not only be deemed "free partitions," but would necessarily also be deemed "dedicated partitions." This unreasonable interpretation would impermissibly obliterate the patent's distinction between dedicated partitions and free partitions. Further, it would mean that, for the accused NetApp products to infringe, they would need to scrub the administrative data of these "dedicated" partitions, but it is undisputed that the non-filesystem region and spare disks are never scrubbed. Thus, what is significant is whether a partition contains, or is capable of containing, customer and redundancy data, not merely administrative data. The Court therefore concludes that a free partition must at least be configured so that it is capable of containing customer or redundancy data in order to be "available to store data," as required by claim 1.

Second, the '012 Patent discloses a scheme for running a separate periodic scrub for each volume, where "[e]ach volume consists of N+M physical devices forming an N+M redundancy group." Homrig Decl. Ex. 4 ('012 Patent) at 13:34-44. This indicates that the patent only contemplates periodic scrubbing of N+M disks that make up the redundancy, or RAID group.

Additionally, the patent states that the periodic disk scrubbing procedure functions by sequencing through all of the device range partitions "on all of the configured volumes for a selected cylinder" before proceeding to scrub the next cylinder. Id. at 14:19-23. This further indicates that the patent contemplates scrubbing configured volumes that are already within a RAID group. Finally, NetApp points out that the claim term "dedicated partition" expressly states that it is "currently storing data." Id. at 17:41-42. NetApp contends that this supports its position that the partitions in the patent change freely from "dedicated" to "free" and vice-versa depending on whether they are "currently" holding data at any given minute, and do not contemplate a situation where a "free partition" would have to undergo a process of being configued to store data and incorporated into a RAID group before it could be a dedicated partition. The Court agrees with these points and construes the term "available to store data" of a "free partition" as "ready and able to store customer and redundancy data."[2]

C. Whether NetApp Products Contain Unscrubbed Free Partitions Available to Store Data

1. Can Hot Spare Disks Be Seen as Free Partitions Available to Store Data?

There is no dispute that NetApp products do scrub the entire filesystem region and do not scrub spare disks. There is also no dispute that spare disks do not contain customer or redundancy data while they remain spares (though they can contain administrative data). The issue is whether spare disks can be seen as "free partitions" that are "available" to store customer or redundancy data. Sun's expert Dr. Smith has opined that DOT "identifies a disk that is connected to the filer but not part of a RAID group as a hot spare which also constitutes a free partition." Homrig Decl. Ex. 8

[2]NetApp also argues that the '012 Patent discloses the use of a free space directory for "dynamically monitoring" how much data each partition is presently storing. See Opp. at 16 (citing Homrig Decl. Ex. 4 at 8:44-50, Fig. 8). NetApp contends that the claimed invention discloses free and dedicated partitions that can fluidly transform from one to another based on whether they are holding data at a given time, and that dynamic tracking of the available space in each partition is the mechanism by which the patent achieves its claimed performance benefit of knowing what to scrub and not scrub. Sun counters that the Court should not indulge NetApp's attempt to read a "dynamic tracking" limitation into the asserted claims because no such limitation is found in the claim terms and NetApp has not sufficiently shown how or why this limitation should apply. Specifically, Sun argues that claims 1 and 16 do not require that a free partition ever become a dedicated partition (though claim 24 does contemplate this type of transition). The Court does not rely on this assertion by NetApp in granting summary judgment.

(Smith Expert Report) at ¶689. NetApp disputes this assessment on numerous grounds.

NetApp argues that a spare disk is not "available to store data," by relying on Mr. Strange's testimony that spare disks "are not part of the filesystem. They are not part of an aggregate. They are not part of a RAID group." Homrig Decl. Ex. 12 (Strange Depo.) at 125; see also Ex. 8 (Smith Expert Report) at ¶ 678 ("storage system connected to a filer running ONTAP includes spare drives that do not include parity protected data"), ¶689 (acknowledging that spare disks are not part of a RAID group but connected to the filer); Ex. 14 (Smith Depo.) at 98 (label for disks in RAID group "identifies the disks that are currently being written and doesn't include the spare").

Additionally, NetApp points to evidence that, instead of currently being part of the system, there is a multi-part process for incorporating a spare so that the new disk is recognized as part of the RAID group. Id. Ex. 12 (Strange Depo.) at 141; Ex. 8 (Smith Expert Report) at ¶¶ 43-47; Ex. 7 (DOT 7.2 Storage Management Guide) at 119, 127. At oral argument, Sun countered that just because some action must be taken to incorporate a hot spare disk into a RAID group does not mean it is not "available to store data." Sun contends that the '012 patent contemplates this type of action being taken at column 10:41-11:40, where it discusses a multi-step process for writing to available memory space. However, these "writing" steps are different in kind than the steps required to incorporate a spare disk into a RAID group and are unrelated to whether the cylinder is "available" in the first place. Additionally, NetApp points out that the specification acknowledges the existence of spare disks (id. at 5:17), but does not mention them in connection with the scrubbing process, and that this also points away from considering spare disks to be free partitions that are intentionally skipped during the scrub process.

Most importantly, NetApp points to Dr. Smith's testimony that "[spare disks] store data when they cease to be spare. They are storing metadata even as spare disks. . . . They are available to store data when they are integrated into the system." (i.e., they are no longer "spare disks" but have become part of the storage subsystem). Id. Ex. 14 at 111-112 (emphasis added). Thus, Sun's expert concedes, as he must, that a spare is available to store data only when it is no longer a spare. Instead, it must be integrated into ("available to") the data storage subsystem before it is capable of storing data. Dr. Smith thus defined a spare as "available to store data," even though is not part of a

redundancy or RAID group until it is integrated through a multi-part process, merely because is capable of later being integrated into the system.

NetApp initially analogized the spare disk to a computer disk in a box on a storeroom shelf "available to store data." Motion at 15. Sun countered correctly that a "hot spare disk" is closer to being integrated into the system than a disk in a box on a shelf, because a hot spare has, in essence, been taken off the shelf and out of the box, inserted into a storage system, powered up and started spinning, has been assigned a DOT label, and is kept in a state of readiness to be incorporated into a RAID group without user intervention. Sun cites Mr. Strange's testimony that a "hot spare" is "plugged into the system, it's spinning, and it's ready to be used immediately, 'hot' meaning relative to it sitting on the shelf and on the – it's powered down and not connected to the system. That would be, you know, a cold spare." Corbett Decl. Ex. 10 (Strange Depo) at 240; see also Ex. 11 at 98-100 (noting "the list of hot spares that we have in the system," but also noting that the spare would have to logically be switched into the RAID group for a failed disk); Ex. 13 (Lau Depo.) at 58-60 (explaining a "hot spare"as a disk "that is not being used to store data at the time and can be used as a spare when one of the active disks fail" or more capacity is needed); Ex. 14 (DOT 7.2 Storage Management Guide) at 4-5, 114-118 (explaining a hot spare disk as part of a NetApp system but not assigned to a RAID group; "It does not yet hold data but is ready for use;" "automatically" assigned to RAID group); Ex. 17 (Sundaram Depo.) at 240 (DOT is aware of the presence of a spare disk); Ex. 22 (Grcanac Depo.) at 109 (same).[3]

According to Sun, this evidence shows that the very purpose of a hot spare is its availability to store data, including customer and redundancy data. Sun relies on the DOT 7.2 Storage Management Guide, which states that, "[a] hot spare disk is a disk that has not been assigned to a RAID group. It does not yet hold data but it is ready for use." Corbett Decl. Ex. 14 (Net App Storage Management Guide) at 117; see also id. at 5 (diagram showing hot spares divided into pools and "waiting to be assigned"); Ex. 5 (Mattson Expert Report) at ¶ 177 (spare disk "does not hold

[3] A more apt analogy might be to a spare tire that is not left behind in the garage, yet that has not already been swapped with a flat tire, but waits in the trunk of the car at the ready to be installed if one of the installed tires fails.

useable data, but is available to be added to a RAID group in the aggregate. Any functioning disk that is not assigned to an aggregate but is assigned to a system functions as a hot spare disk."). Sun also relies on the testimony of its expert, Dr. Smith, for the position that spare disks are available to store data and do not store customer and redundancy data. See Opp. at 14 (citing Ex. 2 (Smith Depo.) at 111-12, 132-33, 145-46, 168. Sun argues that NetApp twists this testimony when it contends that Mr. Smith's testimony supports its position. However, Dr. Smith's testimony is equivocal and does not really support Sun's position either, and runs afoul of the proper construction of the claim, as explained above.

The basic disagreement between the parties boils down to just how close a hot spare disk needs to be to being incorporated into a redundancy group for it to be "available to store data." There is no genuine dispute of material fact as to how the hot spare disk functions. Rather, the parties (and their experts) only dispute the meaning of "available to store data," which collapses into an issue of claim construction for the Court. The claim language "available to store data," in the context of the claim and the specification, cannot reasonably be interpreted to include a spare disk that admittedly is not a part of a redundancy group and is not capable of storing customer or redundancy data unless and until a process occurs by which it is incorporated into a redundancy group. The undisputed evidence demonstrates that only once it is no longer spare, i.e., not a spare disk anymore but instead incorporated into a redundancy group, does it become capable of storing customer or redundancy data. Thus, no reasonable juror could conclude that a "hot spare" is "available to store data" as the term is properly construed.

2. Can the Non-Filesystem Region Be Seen as a Free Partition Available to Store Data?

In support of its summary judgment argument regarding the non-filesystem regions, NetApp first takes issue with Dr. Smith's statement in his expert report that DOT "logically divides a disk into a region that holds parity protected data and a region that does not include parity protected data" and that the "filesystem region" is a "dedicated partition" and the other partition that does not contain parity protected data "corresponds to a free partition." Homrig Decl. Ex. 8 (Smith Report) at ¶ 689, see also ¶ 677. As above, NetApp argues that this testimony is based on an improper

construction of "free partition." NetApp contends that the non-filesystem region simply stores administrative data such as core dumps, RAID labels, cluster mailboxes, and other configuration information that is not even eligible for parity protection and therefore never stores parity protected customer data. Id. Ex. 12 at 244-245. NetApp points to Dr. Smith's testimony that "the function of a free partition is to set aside storage space that is available to the control unit software to write data when it is not efficient to otherwise write to space already storing customer or redundancy data." Homrig Decl. Ex. 8 at ¶ 681. NetApp also notes that Dr. Smith has admitted that a "customer can't direct the system to write data to [the non-filesystem] region" Id. Ex. 14 (Smith Depo.) at 132. In light of these admissions about the functionality of a "free partition," NetApp argues that Dr. Smith cannot now contend that the non-filesystem region is a "free partition" available to store customer or redundancy data, when properly construed.

Similarly, NetApp argues that Dr. Smith's opinion that the "core dump" area of the non-filesystem region is a free partition available to store data (id. Ex. 8 at ¶ 682), flies in the face of his admission that "core dump" data (which is what goes into that region of the non-filesystem) is not customer data. Id. Ex. 14 at 120. NetApp notes that core dump data is not redundancy data, and Sun does not dispute this point. NetApp persuasively points out that under Sun's characterization of the core dump area, it could become entirely full of core dump data, yet still be deemed a "free partition" because it contains neither customer nor redundancy data. However, this situation would not comport with Dr. Smith's definition of a free partition as one "available to the control unit software to write data when it is not efficient to otherwise write to space already storing customer or redundancy data." See Homrig Decl. Ex. 8 at ¶ 681.

Similarly, NetApp argues that the non-filesystem region cannot be an "available" free partition because it has no parity protection, and therefore it is impossible to carry out the claimed scrubbing feature on this region of the system. It contends that the claimed benefit of the invention would not be served by "deciding" to skip the scrub on the non-filesystem region, where such a scrub could never occur in the first place. See Homrig Decl. Ex. 5 ('012 Patent file history) at NAB0014544-45 (discussing the benefit of the invention over prior art). As discussed above, Sun counters that the claim terms themselves do not require parity protection for a free partition.

Finally, NetApp argues that the non-filesystem region is not even a "logical partition" as a the claim requires. It contends that under Sun's view, the entire area available for storing data (the filesystem area) is a dedicated partition while the "odd remaining scraps of disk space, however used, are free partitions." This, according to NetApp, is not a logical division of storage space but derives from the mere fact that the non-filesystem region is not part of the area available for storing data at all. Sun does not address this point in its Opposition.

Sun instead argues that there is no dispute that the non-filesystem regions are skipped by the scrubbing process, do not store customer or redundancy data, and are available to (and sometimes do) store administrative data such as core dumps, RAID labels, cluster mailboxes and other configuration information. See Strange Depo. at 244-45, Haeberli Depo. at 123. Therefore, according to Sun, there is no question that the non-filesystem regions are "free partitions" under Sun's proposed construction of the term.

However, the Court has determined that a free partition must be configured to be capable of storing customer and redundancy data as well as administrative data. Otherwise, the use of the term "data" within the patent would be inconsistent. This conclusion comports with Dr. Smith's testimony that "the function of a free partition is to set aside storage space that is available to the control unit software to write data when it is not efficient to otherwise write to space already storing customer or redundancy data." Homrig Decl. Ex. 8 at ¶ 681. It also comports with Sun's statements during prosecution that the "'active data' stored in the data storage subsystem clearly refers to the 'customer and redundancy' data," but that claims 1, 10, 11, 14, 23, and 24 were amended to recite simply "data" rather than 'active data" in order to advance prosecution of the application. See Dkt. No. 287-7 at NAB0014264. No reasonable juror could conclude that a non-filesystem region which may never store customer data is nevertheless still a "free partition" that is "available to store data" under the correct claim construction.

D. Whether NetApp Products Use "Partitions" To Govern Scrubbing and Whether the Filesystem Region is a Dedicated Partition

Neither party performed any in-depth analysis of the impact of their proposed constructions of the term "partition" on the issues raised in the Motion, and NetApp does not believe construction

of the term is necessary to decide the Motion. See Motion at 11-12, n.2; Opp. at 5-6; Reply at n.6. At oral argument, NetApp essentially dropped its "substantially equal sized" argument and instead changed course and proffered the construction of "a portion of verifiable memory space," which contrasts with Sun's proposal that a partition may include either all of a memory space or a part of it. However, because these issues lend further support to the Court's grant of summary judgment, they are briefly addressed.

NetApp argues that DOT cannot infringe because it does not include a functionality for creating partitions that can be used as a basis for distinguishing between portions of the system that store customer and redundancy data and those that do not. Motion at 12. In this context, NetApp initially offered the proposed construction of a "partition" as a "logical cylinder" (later changed to "portion of verifiable memory space") and noted that NetApp products do not use logical cylinders as storage units and therefore lack the required "partitions." Id. at n.2. To support its construction of the term, NetApp relies on the '012 Patent specification at 3:37-43 and Richard Mattson's rebuttal expert report. See Homrig Decl. Ex. 11 at ¶¶ 231-37. NetApp further argues that the '012 Patent requires that the partitions/logical cylinders be of "substantially equal size," and points out that Sun has not identified any division of disk space in NetApp products that are "substantially equal in size."

In its Opposition, Sun disputes NetApp's proposed construction of the term "partition," and argues that a partition is actually "all or a segment of a memory space." Opp. at 5. Sun notes that NetApp's proposed construction of the term improperly limits the patent to only one type of partitioning scheme, whereas the patent specifies that it is not so limited and a partition can be a volume or redundancy group (see Homrig Decl. Ex. 4 at 13:37-44; 14:16-18), or even an entire memory area (id. at 17:25-27; see also id. at Fig. 5). Sun also argues that there is no basis for NetApp's newly proposed "substantially equal sized" limitation because none of the claims include this limitation. Sun therefore contends that NetApp's argument that its products do not even create partitions would fail under Sun's proposed definition. This is because, if a partition can be *all* of a memory space, then the entire filesystem region can be seen as a dedicated partition.

According to Sun, because NetApp admits that its products scrub the entire filesystem but do

not scrub the non-filesystem region, they do not perform indiscriminate scrubbing but instead intelligently select the areas to be scrubbed and the areas to be skipped. Opp. at 10 (citing Corbett Decl. Ex. 10 (Strange Depo. at 247) (confirming that the parity scrub only runs on the parity-protected region of the system). Sun contends that the preferred embodiment teaches scrubbing entire dedicated partitions regardless of whether they have unallocated areas within them, just as NetApp admits that its system performs. See Homrig Dec. Ex. 4 at 15:30-43; 15:63-16:25; Fig. 10.

NetApp persuasively counters that Sun's reliance on column 17:25-27 and Figure 5 of the specification to argue that a partition encompasses the entirety of a memory space, such as the entire filesystem region, is misplaced. That portion of the specification discusses "priority disk scrubbing," which is a different scrubbing operation from the "periodic disk scrubbing" of the asserted claims. Additionally, that portion of the specification does not refer to the dedicated or free partitions of claim 1, but to the possibility of dividing work between parallel scrubbing processes. NetApp also points out that, if a partition could include the entirety of the filesystem region, as Sun contends, there would be no need to determine whether any particular portion of the filesystem region was dedicated or free at any given time.

The sole portion of the specification that Sun relies on for its position should be construed to encompass *all* of a memory space ('012 Patent at 17:25-27) does not relate to the type of scrubbing – periodic scrubbing – at issue in the asserted claims, but instead pertains to priority scrubbing. Additionally, the word "partition" connotes a division into parts, and Sun has made no showing that the patent contemplates a contrary definition in the context of periodic scrubbing. Further, NetApp is correct that if the term were construed so broadly, "the selective, intelligent scrubbing of the '012 Patent would not be selective at all – it would collapse down to the sequential indiscriminate scrubbing of the prior art." Reply at 4. Therefore, the Court concludes that a "partition" in the '012 Patent is not "all of a memory space," and therefore the entirety of the filesystem region is not a "dedicated partition" as contemplated by the '012 Patent. Summary judgment is appropriate on this basis as well. However, the Court declines to adopt NetApp's proposal that partition should be construed to also include "dynamic tracking" or "substantially equal in size" limitations. NetApp has not adequately set forth the basis for adding these limitations.

For all of these reasons, the Court concludes that no reasonable juror could find that either spare disks or the non-filesystem region of NetApp's products are "free partitions" that are "available to store data," so as to literally meet these elements of the claims. Accordingly, NetApp's Motion for Summary Judgment is GRANTED as to no literal infringement of the '012 Patent.

4. Doctrine of Equivalents

NetApp contends that Sun's doctrine of equivalents theory also fails with respect to the '012 Patent. NetApp correctly notes that Sun may not claim indiscriminate scrubbing of disclosed prior art as an equivalent where it would impermissibly ensnare the prior art. See Wilson Sporting Goods Co. v. David Geoffrey & Assoc., 904 F.2d 677, 683 (Fed. Cir. 1990). Sun counters, however, that it is not attempting to ensnare prior art which "sequentially cycle[d] through all memory locations on all disks in the system," because NetApp's products actually perform the intelligent scrubbing (not sequentially cycling, indiscriminate scrubbing) that the patent claims as an innovation over prior art.

These arguments relate back to the parties' literal infringement theories, and as discussed above Sun has not shown that NetApp's products "intelligently" scrub dedicated partitions currently storing data and do not scrub free partitions available to store data merely by failing to scrub spare disks and non-filesystem regions, which are not available to store customer or redundancy data and therefore can not be scrubbed in any event. Instead, NetApp has demonstrated that there is no factual dispute that its products scrub all of the filesystem region indiscriminately, regardless of whether it contains data, and do not scrub spare disks and the non-filesystem region even if they are full of administrative data. NetApp reasonably contends that the decision of what to scrub and not scrub is not made based on whether a region of the system contains data, as claimed by the '012 Patent. Like the prior art, NetApp's product scrubs all memory locations on disks, and therefore any determination that the technology constitutes an equivalent would impermissibly ensnare prior art.

Applying the function-way-result test, NetApp persuasively argues that no reasonable juror could find that the spare disks and non-filesystem regions perform the same function, in the same way, and achieve the same result. As discussed above, Sun's view that spare disks and non-filesystem regions perform the same "function" as "free partitions" because they are "logical attribution[s] of space available to store data" (Homrig Decl. Ex. 8 (Smith Expert Report) at ¶ 681;

see also ¶¶ 682, 692) does not comport with the Court's construction of a "free partition" because spares are not even part of a RAID group, and neither hot spares nor non-filesystem regions are associated with parity data. Id. at ¶¶ 677-78, 689. Dr. Smith testified that the function of a free partition is "to set aside storage space that is available to the control unit software to write data when it is not efficient to otherwise write to space already storing customer or redundancy data," (id. at ¶ 681), and it is undisputed that spare disks and non-filesystem regions never perform this function because they cannot store customer and redundancy data.

Sun's arguments that the technologies operate in the same "way" are also unpersuasive. Sun's expert cites no evidence that supports his opinion that the way in which a free partition operates is the equivalent of a spare disk or non-filesystem region. See id. at ¶¶ 681-82. Mr. Strange's testimony touching on this point (cited by Dr. Smith) only establishes that a parity scrub runs only on a parity protected region, an obvious point that does not support Sun's doctrine of equivalents argument. NetApp is correct that its indiscriminate scrubbing of the only memory space that can be scrubbed is not performed in the same "way" as the claimed invention.

Finally, NetApp argues that Dr. Smith's testimony that the accused product achieves an equivalent "result" is belied by the fact that neither spare disks nor the non-filesystem region are available to store data, and do not aid the accused products in intelligently scrubbing disk regions that contain data and deciding not to scrub those regions that do not. Sun counters that the accused products' partitioning of spare disks and the non-filesystem region offers the same benefits that partitioning offers in the patented invention because purportedly "it is a matter of common sense" that creating a scrubbing process that ignores certain data will be faster and more efficient. Opp. at 20. Sun argues that whether or not parity is associated with the non-filesystem region or spare disks does not change the benefit gained by skipping these areas. NetApp responds that, if the invention were a matter of "common sense," it would raise validity issues. More importantly, NetApp persuasively argues that viewing its products as achieving an equivalent result (i.e, intelligent scrubbing) merely because they do not scrub the non-filesystem regions and spare disks – which cannot be scrubbed – is the opposite of common sense. The Court agrees.

The undisputed evidence of how the accused products operate shows that they do not

perform substantially the same function in substantially the same way to achieve substantially the same result. They do not divide space into dedicated partitions currently storing data and free partitions available to store data, or make any intelligent determination of what to scrub and what not to scrub. Sun's attempt to capture this different technology within the scope of its patent is rejected and NetApp's Motion is GRANTED as to the doctrine of equivalents.

IT IS SO ORDERED.

Dated: February 19, 2010

Elizabeth D. Laporte

ELIZABETH D. LAPORTE
United States Magistrate Judge